### CORRECTED VERSION

# (19) World Intellectual Property Organization International Bureau



## 1 (CERTE CHINECER I CORRECTOR CORRECTOR CORRECTOR IN STATE CHINE CHINECELLE C

(43) International Publication Date 29 April 2004 (29.04.2004)

PCT

# (10) International Publication Number WO 2004/035565 A1

(51) International Patent Classification<sup>7</sup>: C07D 401/12

(21) International Application Number:

PCT/SE2003/001602

(22) International Filing Date: 15 October 2003 (15.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0203092-2

18 October 2002 (18.10.2002) SI

(71) Applicant (for all designated States except US): AS-TRAZENECA AB [SE/SE]; S-151 85 Södertälje (SE).

(72) Inventor; and

- (75) Inventor/Applicant (for US only): GUSTAVSSON, Anders [SE/SE]; AstraZeneca R & D Södertälje, S-151 85 Södertälje (SE).
- (74) Agent: GLOBAL INTELLECTUAL PROPERTY; AstraZeneca AB, S-151 85 Södertälje (SE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declaration under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

### Published:

with international search report

(48) Date of publication of this corrected version:

19 May 2005

(15) Information about Correction:

see PCT Gazette No. 20/2005 of 19 May 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR THE SYNTHESIS OF A BENZIMIDAZOLE COMPOUND

(57) Abstract: A process for the manufacture of omeprazole or esomeprazole from pyrmethyl alcohol via pyrmethyl chloride and pyrmetazole characterized in that the whole reaction sequence is carried out without any isolation or purification of intermediates. Further, the reaction is carried out in a solvent system common for the whole reaction sequence and inert to the reactants formed during the process and used in the process and comprises a water immiscible organic solvent and a specified amount of water.